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(54) POROUS COMPOSITE SHEET AND PREPARATION THEREOF

(57)Abstract:

PURPOSE: To obtain a porous composite sheet excellent not only in surface smoothness but also in dynamic characteristics and hydrophilicity by adding specific fine particles to a composite sheet obtained from staple fibers and a binder resin.

CONSTITUTION: A web is formed by mixing particles of a thermosetting phenol resin whose resin elongation prescribing heat flowability of 3 - 15cm and stable fibers having a length of 1 - 30mm and subsequently pressed and heated to form a porous composite sheet.

Subsequently, silica fine particles having a particle size of 1 $\mu$ m or less are added to the porous composite sheet. The whole of this sheet has properties such that a void ratio is 40 - 80%, bending strength is 50kg/cm<sup>2</sup> or more, modulus of elasticity in flexure is 1,000kg/cm<sup>2</sup> or more, a water absorbing speed is 30mm/10sec or more and water absorbancy is 60wt.% or more.